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ABSTRACT

A SUMMARY OF THE MAJOR FINDINGS IN THE STUDY OF POSSIBLE SITES FOR KANSAS CITY KANSAS COMMUNITY JUNIOR COLLEGE IS DISCUSSED. THE MAIN CONCERNS ARE WITH THE FEASIBILITY AND DESIRABILITY OF LOCATING THE COLLEGE ON AN URBAN, SUBURBAN, OR RURAL SITE IN WYANDOTTE COUNTY. THE ROLE AND SCOPE OF THE COLLEGE ARE STUDIED TO FIND THOSE ELEMENTS WHICH GIVE DIRECTION TO THE OVERALL CAMPUS DEVELOPMENT. THESE ELEMENTS, COMBINED WITH STUDENT CONSIDERATIONS, REQUIRED SITE AREA, DEVELOPMENT COST, AND THE FUNCTIONAL RELATIONSHIPS BETWEEN THE COLLEGE AND THE COMMUNITY, PROVIDE THE BASIS ON WHICH DECISIONS ARE MADE IN SELECTING A SITE. USING THE LOCATION EVALUATION CRITERIA THE SUBURBAN SITE WAS SELECTED. MAPS, DIAGRAMS, AND SKETCHES EXPLAIN THE EVOLUTION OF THIS SELECTION PROCESS. (TC)

ED036122

KANSAS CITY KANSAS COMMUNITY JUNIOR COLLEGE

SITE LOCATION STUDY

CAUDILL ROWLETT SCOTT
ARCHITECTS PLANNERS ENGINEERS
HOUSTON NEW YORK

FEBRUARY 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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INTRODUCTION

This report is a summary of the major findings in the study of possible sites for the Kansas City Kansas Community Junior College. The study is concerned with the feasibility and the desirability of locating the college on an urban, downtown site; a suburban site; or a rural site in Wyandotte County.

The role and scope of the college were studied in an effort to find those elements which give direction to the overall development of the campus. These elements, combined with the most desirable functional relationships between the college and the community, provide a basis by which decisions can be reached in making a site selection.

The community was studied with a view toward its potential development, as well as existing conditions. It is, however, the potential of the community that is most important in the development of criteria for the location of the college. The college itself must look to fulfilling the needs of a community whose future pattern of physical development and socio-economic characteristics will be quite different from that of today.

ROLE AND SCOPE

SERVICE AREA

Today the college primarily serves the people of Wyandotte County, but due to a lack of junior college facilities in adjoining Kansas counties, there are approximately 350 students from Johnson County and 30 students from Leavenworth County.

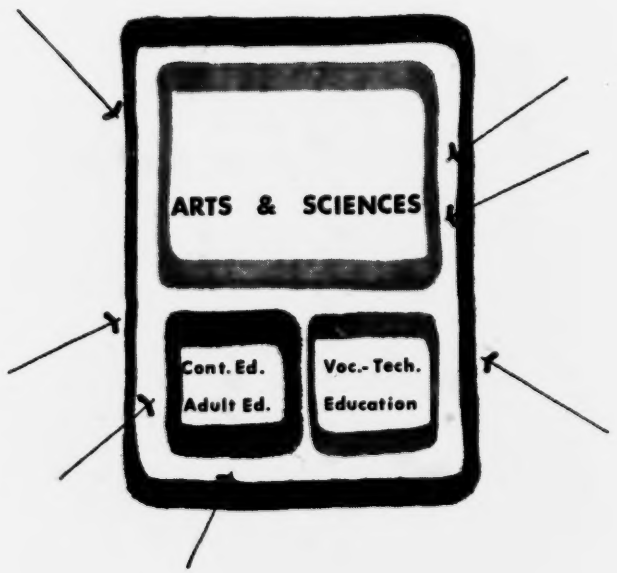
In the future, Johnson County will have its own community junior college and will, at that time, cease to be an area of student origins. However, some reciprocity between the two counties may take place as each develops special areas of education that could not economically be duplicated by the other.

The status of Leavenworth County will probably have a greater effect on the college. It is anticipated that future state legislation will place Wyandotte and Leavenworth Counties in the same community college district. Although the population of Leavenworth County is smaller than that of Wyandotte, it is important to consider that in the future the people of Leavenworth County could assume a part of the responsibility in support of the college.

PROGRAM DEVELOPMENT

The goal of the college will be to serve all of the people in the county or community college district. No one group can be singled out as being of primary concern to the college. Rather, the college will develop a high quality program that best meets the needs of the total population. This includes a strong program in the liberal arts and sciences; programs geared to the student continuing his education beyond the community college; two-year terminal programs; adult education; continuing education for the business, industrial and residential community, and vocational-technical education that will concentrate on the development of quality education in certain areas requiring a high degree of specialization. Vocational-technical education, in the broad sense, will be left to the vocational-technical schools themselves. However, interactions between the college and these schools will take place as each strives to complement the others in providing a wide range of educational opportunities for its students.

The implications to location are that the development of these programs and their ultimate success will depend in part upon having a site large enough to accommodate the academic and support facilities required by the program, selecting a site that is easily accessible to the total population, and development of a physical plant that identifies the college as a community focal point.



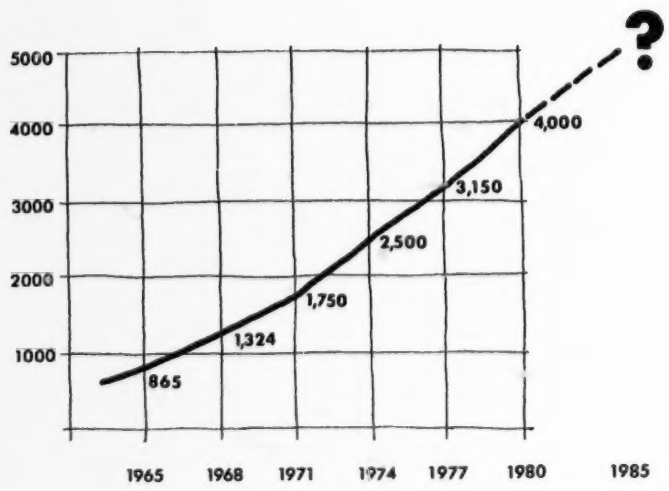
ENROLLMENT AND GROWTH

At the present time an enrollment of 4,000 FTE* students is projected by 1980. Although planning will deal with providing facilities required at a 4,000-student level, some thought must be given to what happens beyond 1980. This can have serious site implications.

Education is one of the fastest growing areas of American life, and it is not unreasonable to assume that within the next 20 years demands will exceed today's expectations. Also, there are conditions that imply a growing role and scope of the community college. The universities are becoming overcrowded; and as they seek to attain excellence in graduate education and research, they will no doubt look to the community colleges to take a major responsibility in the education of the lower division. Adult and continuing education will grow through increased public interest, increased leisure time, and through the efforts of business and industry to keep abreast of the times. There is also an unexplored potential for educational demands in the growing number of senior citizens.

If growth is to occur beyond 1980 and if the college is to operate primarily from one location, steps must be taken to select a site that would insure the ability to expand. The alternative to this would be to limit enrollment to 4,000 students and let growth take place in a second college facility.

*Full Time Equivalent

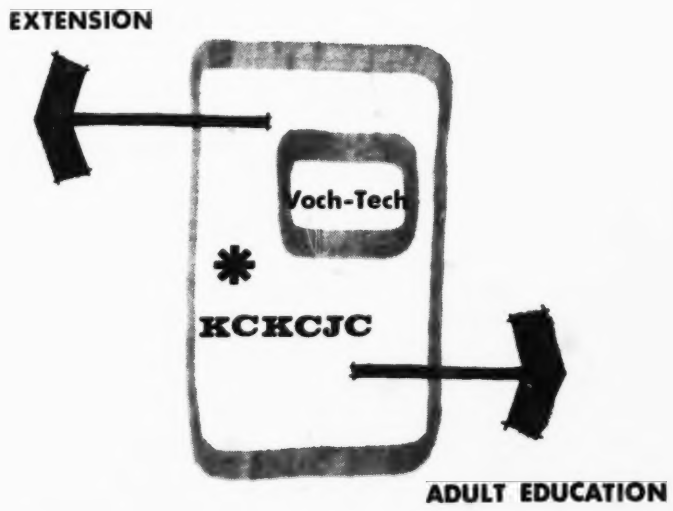


AFFINITIES

The use of off-campus facilities in the instructional program results in an affinity between the college and the facilities that must be considered in the location of a new facility. The area high schools are used for adult education, local hospitals are used in conjunction with the medical technology programs, Fairfax Airport is used in the flight training program and, at the present time, off-campus facilities must be shared for physical education.

An important and exciting aspect of the college is the potential of its providing education on an extension basis. In providing optimum educational opportunities, the college would take education to the people, rather than have the college as the sole source. Adult and continuing education programs could be available for all sectors of the community. This could be accomplished through the establishment of educational nodes in neighborhood centers and other public facilities.

The actual development of this type of program will have implications on location. In this case, it is the future community that must be considered, for as growth occurs new public facilities will be developed. The college should be central to these facilities.



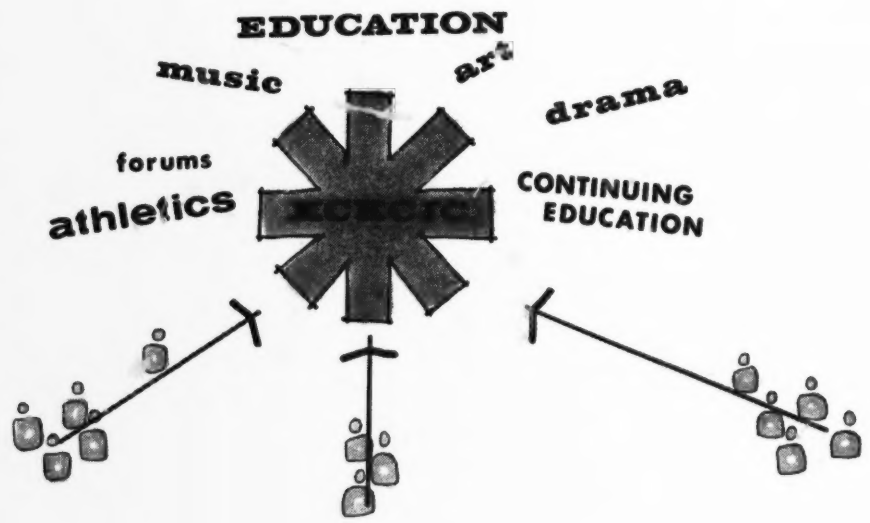
THE COLLEGE AS A COMMUNITY FOCAL POINT

It is the goal of the college to become a major focal point as the educational and cultural center of the community. Through the educational programs, and cultural and sports events generated by the educational programs, the college will provide opportunities for total community involvement.

As the liberal arts programs are more fully developed and facilities become available, music, art and drama will provide a base on which to build a cultural program. The development of continuing education will provide educational opportunities for the total community, and the continued support of physical education and athletics will result in activities for the sports-minded community.

The extent to which the college is developed as a community center will have important implications on location and site requirements. If the college is to develop its physical plant for these activities, such as an auditorium and athletic facilities, then a site large enough to accommodate them must be selected. Also, adequate areas must be available for visitor parking, and the site must be easily accessible from all parts of the community. If the college is to use other public facilities for these activities, either existing or planned, the location should be convenient to those facilities.

For the purposes of this study, it is assumed that the college may develop many of the facilities for its own use.



STUDENT CONSIDERATIONS

ORIGIN

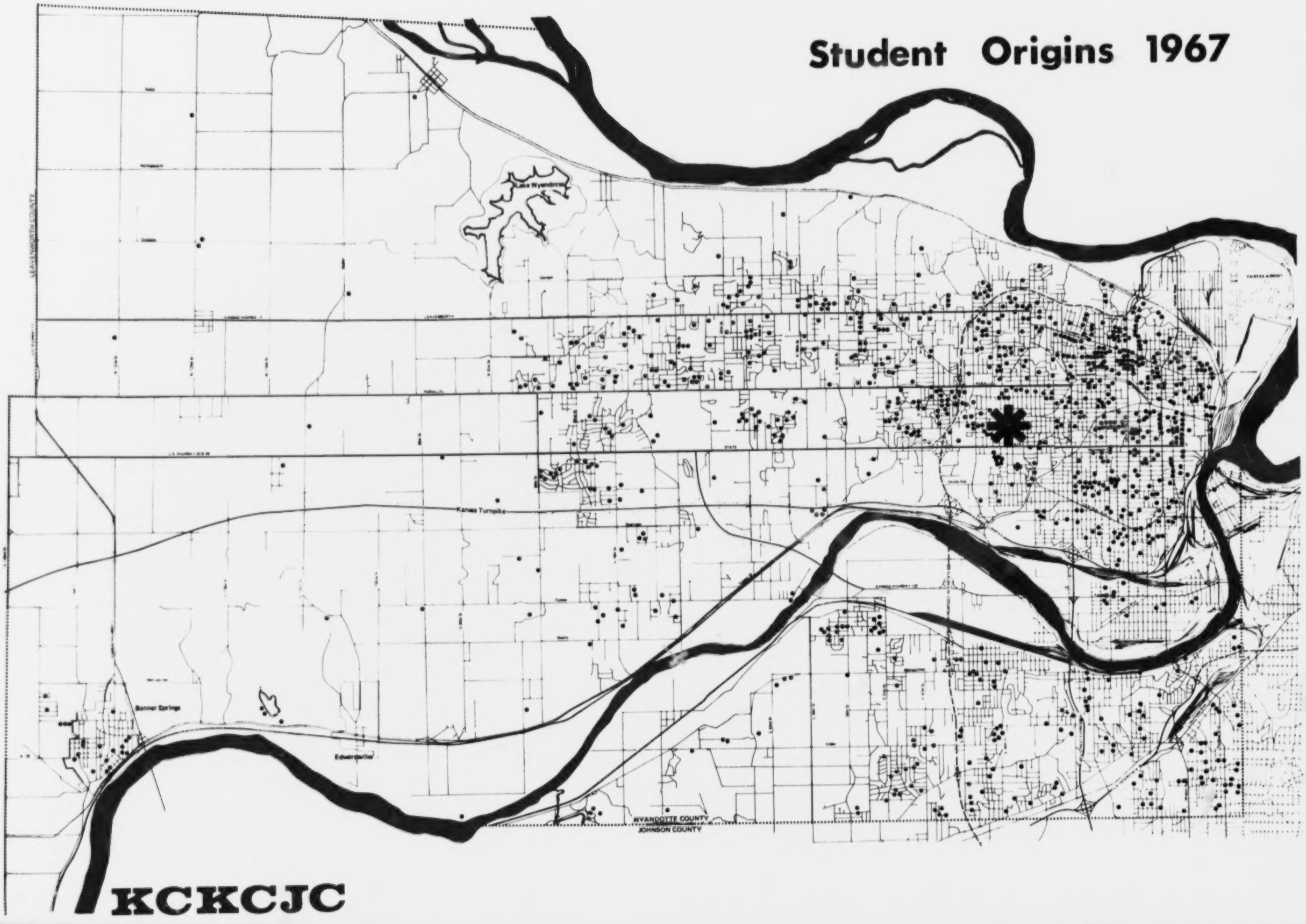
Student origins in 1967 located the centroid of student population at a point just north of State Street, between 18th Street and Interstate Highway 635. As shown on the map, Student Origins 1967, the students are scattered throughout the county, with most of them coming from urbanized areas. The largest concentration is east of 18th Street and north of State Street. Studies of the population in relation to student origins show that rather than being a percentage of one particular social or economic group, the distribution of students is more in direct ratio to the population density of an area. The more dense the population, the greater the number of students it generates.

An example of this which appears to be consistent throughout the county is a comparison between origin-destination zones 2816 and 4715. Zone 2816 is generally bounded by 10th Street, 18th Street, Chelsea Trafficway and Interstate Highway 635. Zone 4715, in the western portion of the city, is bounded by 75th Street, 83rd Street, Parallel and Leavenworth Road. Zone 2816 at a population of 7,128 generated 80 students, and zone 4715 with a population of 2,538 generated 23 students.

In terms of the ratio between population and students there is not much difference. Zone 2816 generates one student per 110 people; zone 4715, one student per 90 people. Zone 4715 is generating more students per population, but this is discounted because of probable error inherent in a comparison of figures from two different years.

The difference in the median family income between these two zones is almost $2,000. Zone 2816 has a median family income

Student Origins 1967



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of $7,107 and zone 4715 has a median of $9,131. Although definitive proof is not available, this would indicate that the higher income zones tend to generate more students. It is important to note that the higher income zones are generally to the west of Interstate Highway 635 while the more intensely developed urban area east of this highway contains most of the lower income families.

MEDIAN FAMILY INCOME

The following table shows the distribution of students as related to the median family income level from which they originate.

MEDIAN INCOME		STUDENTS
below	$5,000	56
$5,000 -	6,000	55
$6,000 -	7,000	151
$7,000 -	8,000	285
$8,000 -	9,000	291
over	$9,000	109

Average median family income for all students – $7,398

SOCIO–ECONOMIC CONSIDERATIONS

This analysis points up the fact that the student population does not originate from any particular group. The next question is, then, would a location more remote to the lower income groups be a handicap in their persuance of education? From the standpoint of long-range planning, the answer would be negative. In planning for 1980 and beyond, it is reasonable to assume that the economic level of the now low income group will change. National, state and local education and economic assistance programs are striving to upgrade the less fortunate sector of the population to a minimum economic standard. If these programs are in any way successful, the now so-called lower class will not constitute the problem it does tdoay. With this in mind, there does not seem to be any criteria that would point to a location that should be more convenient to one group of the population than to another. Rather, the location should be convenient to all.

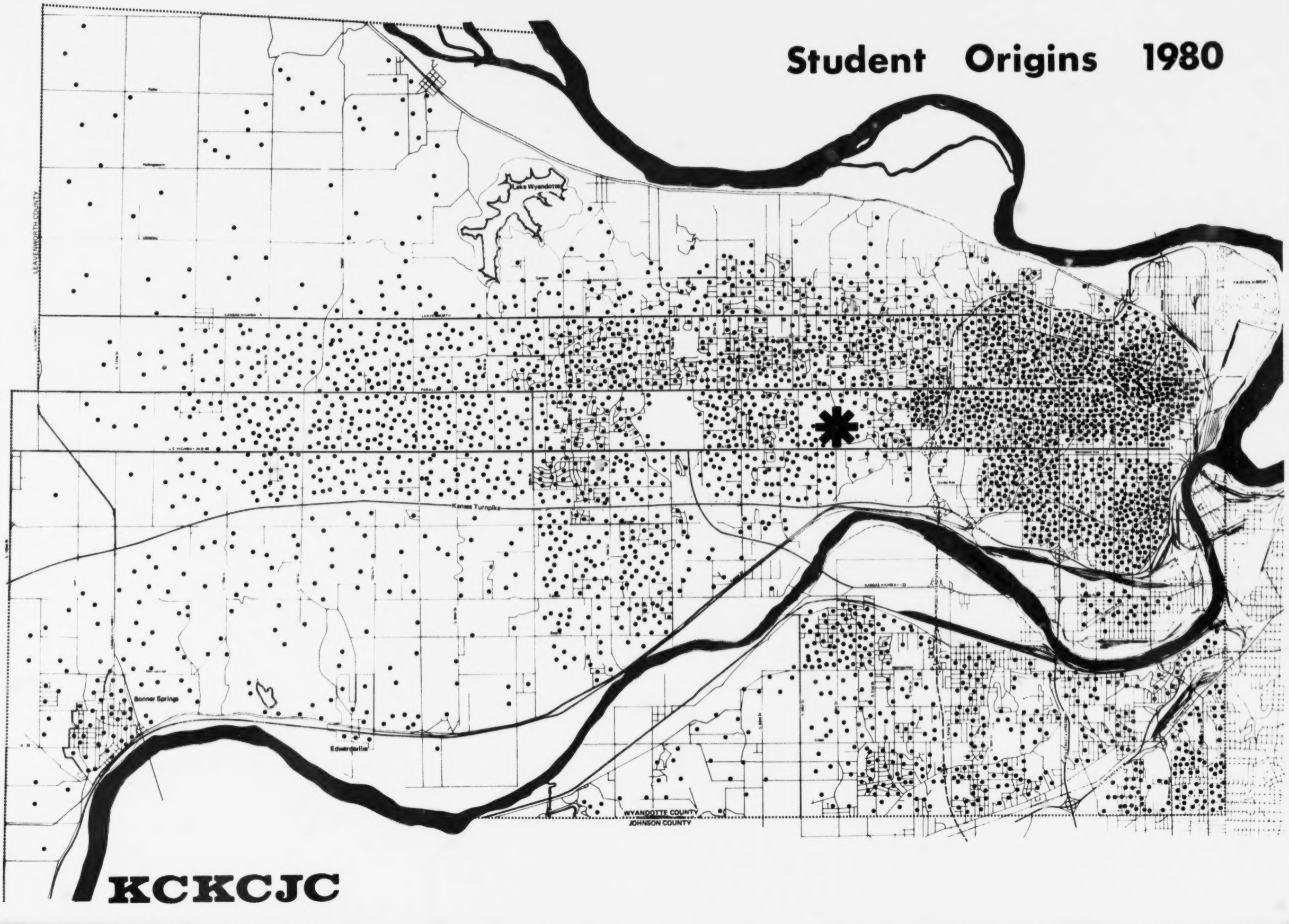
POPULATION GROWTH

City, county and metropolitan area plans indicated that growth will occur primarily to the west along State Street. Disucssions with the Community Renewal Agency have revealed that within the now intensely developed urban area, densities will not be increased through renewal work, and if anything will decrease as more land is opened up for parks, open space and supplementary neighborhood land uses. The population of Wyandotte County is projected to 260,000 by 1980, and 324,000 by 1990. Most of the increase, from a 1960 population of 185,000, will take place in the western portion of the county.

PROJECTED STUDENT DISTRIBUTION

Should the ratio between students and population remain constant, the possible distribution of students by 1980 may be as shown on the map, Student Origins 1980. This distribution would place the centroid of student population at approximately 55th and State Streets.

Student Origins 1980



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STUDENT QUESTIONNAIRE

The college questioned the present student body for information on methods of transportation to and from school, opinions concerning a preferred location for a new facility, and student employment as it might be affected by the location of the new facility. The response to the questionnaire overwhelmingly supports the construction of a new facility in a suburban location. For that segment of the community now using the college the majority drive to the college; the majority prefer a site outside of downtown Kansas City, Kansas with space for development of a more extensive type of facility; and, for the majority, the location of a new facility would not affect their employment. The complete results of this questionnaire appear on the following page.

The fact that 73% of the students drive to college and 77% desire a location outside of the downtown area is a reflection of the current parking problems at the existing college. The students no doubt recognize the difficulty in providing adequate parking in a downtown location and the probability that a suburban location would include close and convenient parking.

Although there is little more to be drawn from this questionnaire, it may be important in locating the college to recognize that student jobs may be generated more in suburban areas than in a downtown area. If the student is full-time, he must look for a job that is created by other than daytime business peaks. The suburban retail operation is geared more to this kind of frequency than is the downtown. Traditionally, downtown is a daytime operation whereas the grocery, drug, variety and specialty outlets in suburbia operate during the evening hours and experience a major portion of their business at that time.

STUDENT QUESTIONNAIRE RESULTS

TRANSPORTATION

73%	regularly drive an automobile to college
15%	ride in an automobile with someone else who drives to college
6%	use some form of public transportation such as buses, taxis, etc.
3%	regularly walk to college

LOCATION

77%	prefer a location outside of downtown Kansas City, Kansas, with space for development of a more extensive type of faciltiy
15%	prefer a location downtown with a possible high-rise type of construction
5%	prefer a location downtown with limited acreage and a compact type of building location

EMPLOYMENT

77% hold a job while attending college

As far as the job is concerned, it would be better if the college were located:

12%	no farther out than 10th Street
13%	no farther out than 18th Street
9%	no farther out than 39th Street
10%	no farther out than 55th Street
16%	no farther out than 78th Street
39%	no preference

REQUIRED SITE AREA

The area required for facilities needed to implement the educational program is an important consideration in the selection of a site and is usually determined by the program itself. Although a completed program is not available at this time, it is necessary for purposes of this study to estimate these requirements. Consideration of the projected role and scope of the college, combined with past experience and research by CRS, has made it possible to estimate the requirements for 4,000 students. The estimate which appears on the following page is for purposes of this study only.

Each of the required site areas shown may be varied or altered by Board policy or limitations imposed by the site or program. The building area could be accommodated on a very small site through the use of high-rise construction. For example, at a density with a floor area ratio of 2.0 and a ground area coverage of .50%, the college could be accommodated on a 6.4-acre site. This would, however, result in an average building height of five stories.

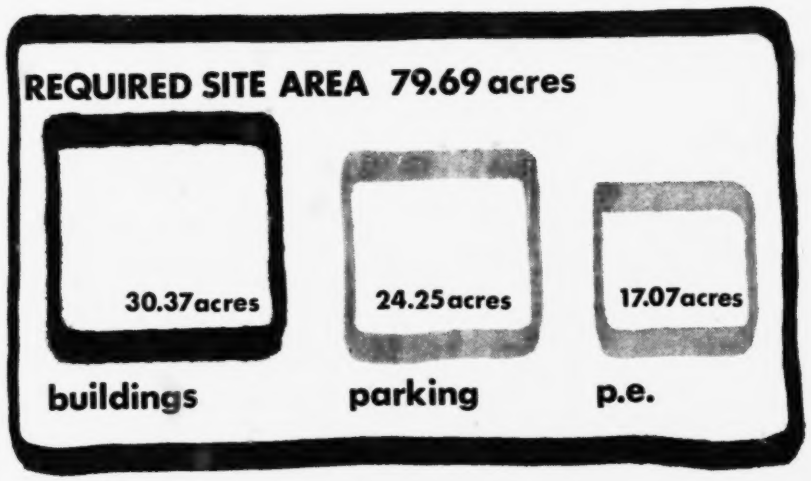
Physical education and athletic areas may also vary depending on the type and amount of facilities provided. The 17.07 acres would be for a minimum type field facility. Of the total academic program, the role and scope of the physical education and athletics program will have considerable site implications. These activities require substantial land areas for instruction, practice and sports events. If the college is committed to the continuance of a physical education and athletic program a larger site must be acquired. The alternatives are:

Provide typical gymnasium facilities on campus, with field facilities at a remote location.

Concentrate on the development of those activities that do not require large outdoor field areas. Develop a health club type of facility.

The implementation of either of these alternatives would permit the selection of a substantially smaller site. The goal of the college is to develop physical education in areas of demand. The athletic program and health club type of activities will be generated from the physical education program itself. It is assumed for purposes of this study that the college will continue to provide all types of physical education and athletic programs, and requires field areas as a part of the college facility. The parking requirement is the least variable of the site requirements if the college is to provide parking for the student body. As shown on the questionnaire, most students do drive to the college. If the college is to provide parking for these students, the site must be large enough to construct surface lots, or resources must be available for the construction of parking garages.

The programming and planning of the new facility will be for 4,000 FTE students by 1980. Should the college continue to grow after 1980, additional area would then be required for expansion.



ESTIMATED AREA REQUIREMENTS FOR 4,000 STUDENTS KANSAS CITY KANSAS COMMUNITY JUNIOR COLLEGE

BUILDING AREA REQUIREMENTS

Instructional			
Academic	32,900 SF		
Science	28,400		
Business	13,900		
Fine Arts	22,500		
Voc-tech and Engineering	46,300		
Physical Education	28,200		
	172,200 SF		287,000 Gross SF
Support			
Administration	11,210 SF		
Counseling and Testing	2,220		
Health Services	650		
Data Processing	5,000		
Library	36,575		
Audio Visual/TV	8,090		
Student Center	47,815		
Auditorium (2200 cap.)	37,050		
Building Services	13,500		
	162,110 SF		270,000 Gross SF
Total			557,000 Gross SF
			139.3 SF/Student

SITE REQUIREMENTS

Building Area (3:1)	38.37 Acres
Parking (3020 cars)	24.25
Physical Education fields	17.07
Total	79.69 Acres

DEVELOPMENT COST

In comparing costs between an urban and suburban campus, three major areas of cost are usually evaluated: land acquisition, building construction, and site development.

LAND ACQUISITION

Although actual land acquisition cost can only be determined after thorough investigation of land prices throughout the county, undoubtedly per acre land cost in the intensely developed urban area would be higher than in the suburban areas. If developed urban land was acquired, improvements of the land would tend to make land costs higher. Also, if the land were outside of an urban renewal area, the college would have to assume the cost of land clearance.

BUILDING CONSTRUCTION

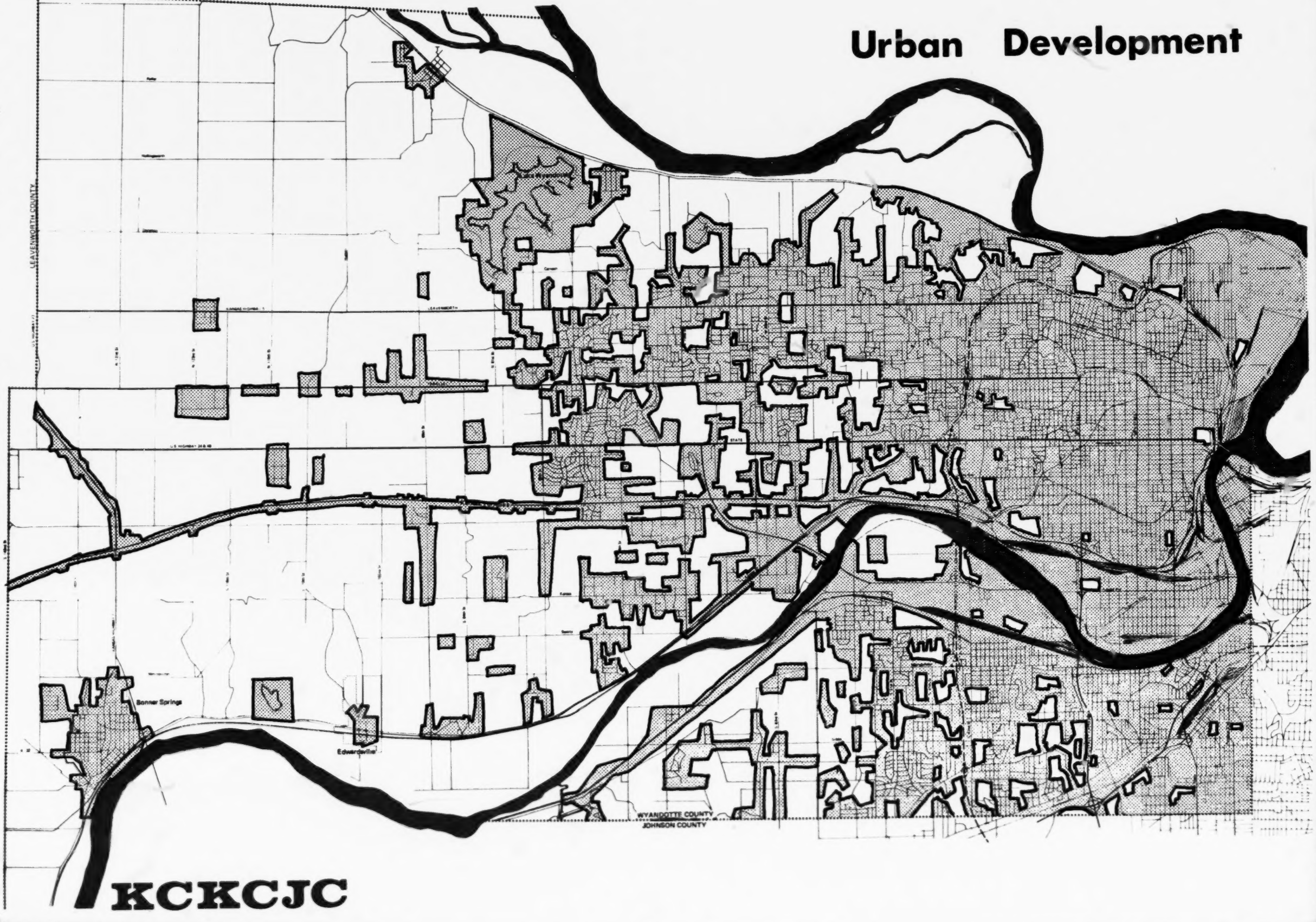
In an urban setting, because of limited availability and high cost of land, sites are usually comparatively small. Consequently, high-rise construction is required for proper utilization of the site. On the other hand, lower land cost in a suburban location would permit a larger site and allow low-rise construction which usually costs from 2.5% to 3% less than does high-rise.

SITE DEVELOPMENT

Site development costs include utility distribution systems, walks, drives, landscaping, playfields and parking. Parking requirements are significant in a commuter college and, where land is limited, parking structures must be provided. For this reason, site development costs for the urban location can run from 2.5 to 3 times more than for the suburban site.

The above comparisons will, of course, be affected by the actual costs of the land. However, for the purposes of this study, an urban campus can be expected to cost from 25% to 30% more than a suburban campus.

Urban Development



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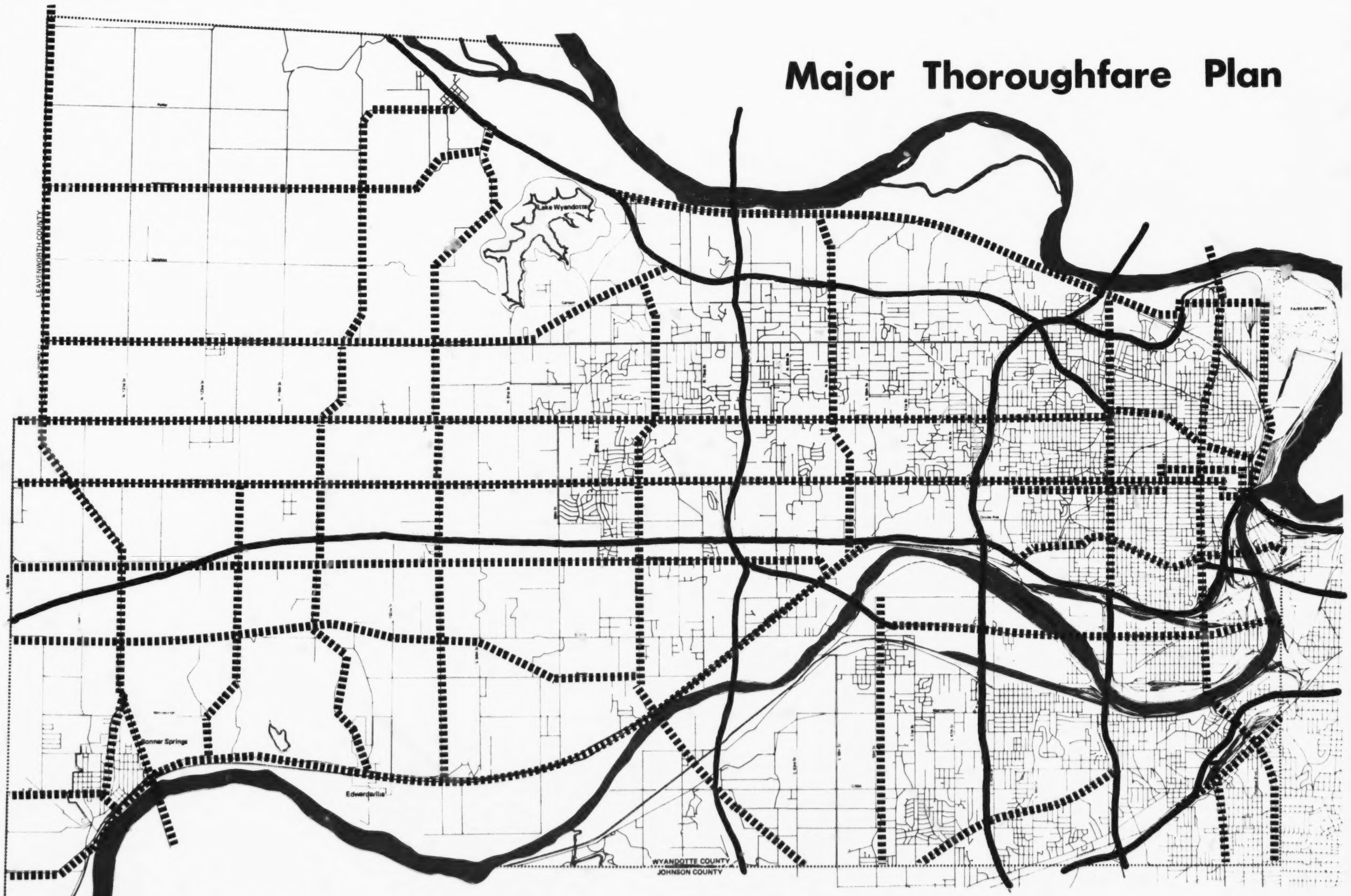
COMMUNITY CONSIDERATIONS

ACCESS

Access to the college is a major factor in considering location. Because the college must depend on a commuter student population, and because its development as the educational-cultural center of the community will attract people from all parts of the county, direct and convenient access from all areas is desirable.

In this study access has been reviewed from the standpoint of the future system of thoroughfares. As shown on the Major Thoroughfare map, the proposed system of freeways and major thoroughfares will provide excellent access to all parts of the county. The areas at the intersection of urban expressways, but at least one-half to one mile from the interchange of these expressways, are areas of optimum access. These locations insure the availability of access from the expressway to the major street system, a transition not usually provided at the interchange of two major expressways. The location most central to all parts of the county is at the intersection of the turnpike and the KCI expressway planned in the vicinity of 72nd Street.

Major Thoroughfare Plan



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COMMUNITY PLANS

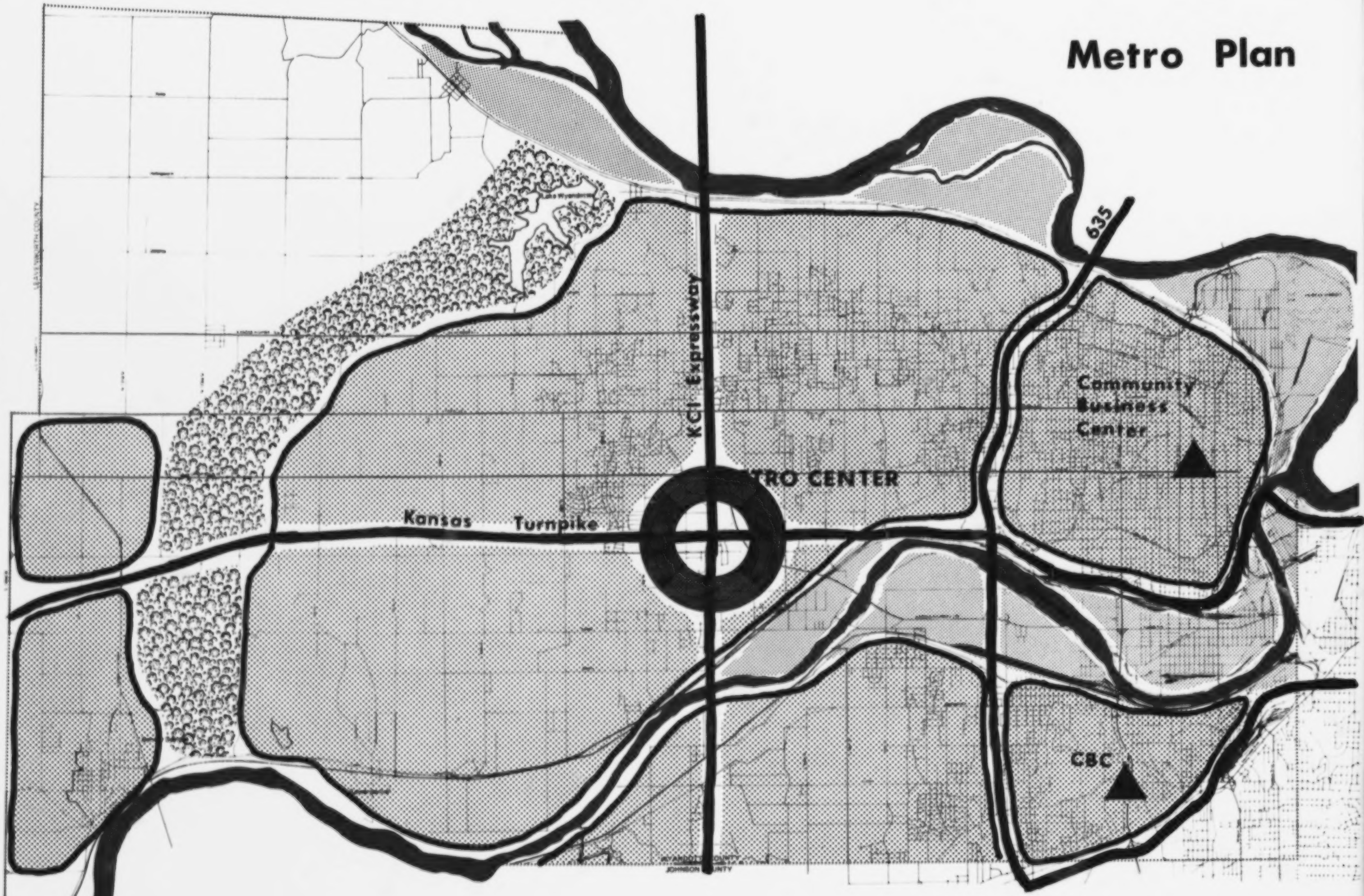
The various planning agencies in the city, county and metropolitan area are involved in planning studies in their respective areas. These studies are concerned primarily with the planning of land use, transportation systems, and community facilities for future development.

The Kansas City Metropolitan Planning Agency is currently engaged in a comprehensive study dealing primarily with the development of a regional highway system and the general pattern of land use in the seven counties of the metropolitan area. Potential development of Wyandotte County is shown on the map entitled Metro Plan. Generally, the proposed pattern consists of residential development extending westward to about 115th Street and industrial development concentrated along the Missouri and Kaw Rivers. A greenbelt is proposed along the western edge of the urban area, extending from Wyandotte County Park to Bonner Springs. This permanent open space preserve would provide relief to urban development, as well as provide areas where adequate park and recreational facilities could be developed for the urban population. The one important fact shown by the map is that the center of population will shift significantly to the west.

One of the most important elements in this plan is the development of a major center, The Metro Center, where the two major metropolitan expressways, the Kansas Turnpike and the proposed KCI expressway cross. This center would become the focal point of business, cultural and recreational activity in the county; and second, with the shift of population to the west, a substantial amount of community facilities will have to be developed to serve this area. The concept is for a clustering of these facilities into a major center. Also, the relationship of downtown Kansas City, Kansas to downtown Kansas City, Missouri is a major factor in the metro center concept. The Missouri Central Business District so overshadows the Kansas City, Kansas CBD because of its extensive commercial, entertainment and cultural facilities that the development of a like center on the Kansas side is unlikely because of the close proximity of these two districts. This condition leaves Kansas City, Kansas and Wyandotte County without a major center of this type. The Metro Center would not only provide these facilities but would also give the urban area an identifiable centroid of activity. The location is central to the projected distribution of population, and on the main thoroughfares of local and regional transportation. From the standpoint of the college, a location in conjunction with the Metro Center would offer exciting possibilities for the development of a new business-recreational-cultural and educational center of the urban area.

The city is presently engaged in the study and planning for renewal of the Central Business District. The college, as a part of the renewed CBD, would also offer great potential for an urban college development. The potential joint development and use of cultural facilities by the college and the city could greatly expedite the development of the college as an educational-cultural center. The suggested site for a downtown location is approximately eight acres. Unless additional land could be acquired adjacent to this site, a dense type of development would be necessary. Furthermore, at the 4,000-student level, it would be necessary to build parking garages or cease to provide parking. Also important in the consideration of the downtown site is that expansion would be limited unless additional land were acquired as a hedge against expansion.

Metro Plan



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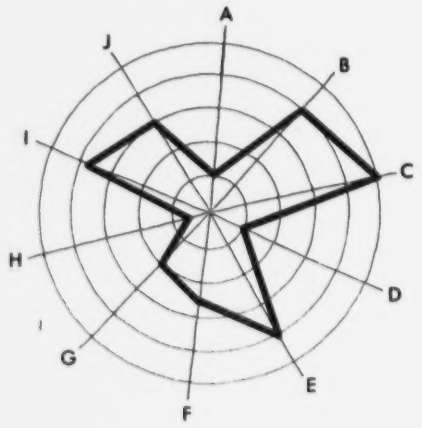
LOCATION EVALUATION CRITERIA

The following are criteria generated by the program to which development of a new college facility should in some way respond. The college may wish to supplement the criteria with additional points important to its objectives. The following were selected as being those most important in the evaluation of the three possible locations. Each was scored and plotted on the following diagram. The suburban site responds most favorably to the criteria.

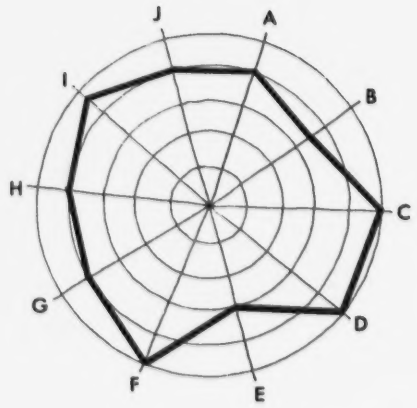
CRITERIA

A/Growth – Expansion beyond 4,000
B/Affinities – Potential joint facility use
C/Community – Development of the college as the educational-cultural center of the community
D/Parking – Ability to provide adequate parking for students and staff
E/Efficiency – Minimize duplication of space and services
F/Phasing – Respondent to the problems inherent in phase construction
G/Land Cost and Availability
H/Development Costs
I/Access – Convenient community access
J/Community Development – Compliment and support future development plans of community

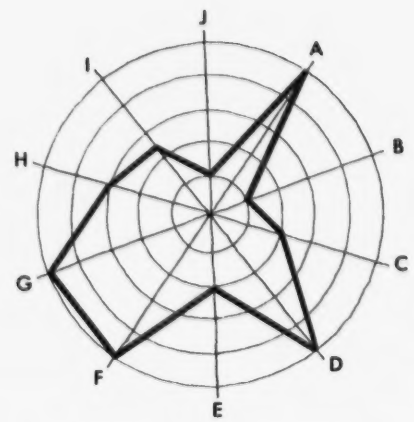
URBAN LOCATION.....



SUBURBAN LOCATION.....



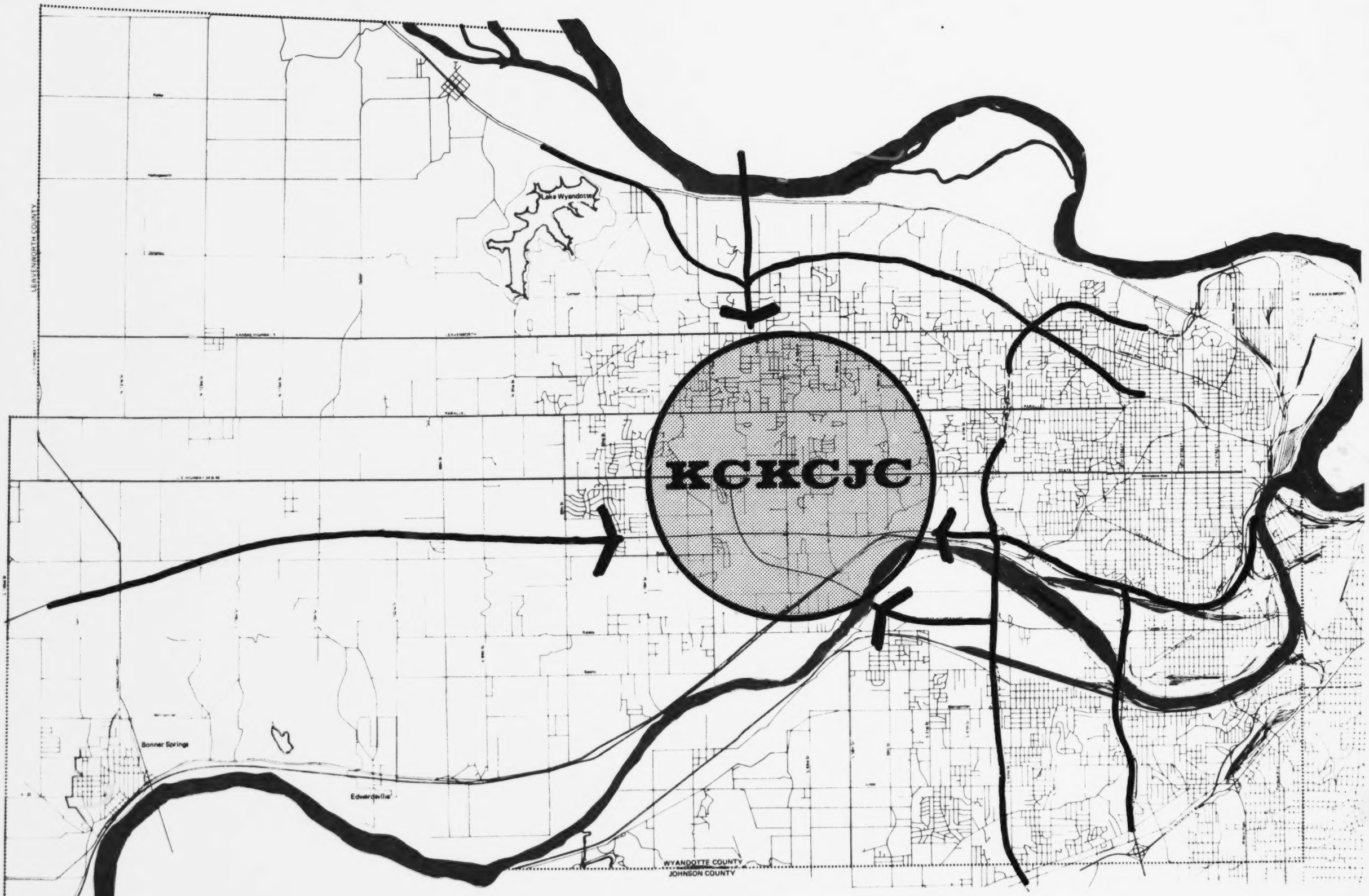
RURAL LOCATION.....



RECOMMENDATION

From the study and analysis of the various determinants of site location, there is a strong indication that in terms of cost, community service, access, and the ability to fulfill the educational program site requirements, the most realistic solution would be to choose a suburban location.

An optimum location from the standpoint of access, available vacant land, and the centroid of the population would be an area between 51st Street, 72nd Street, Leavenworth Road and a line just south of the turnpike. The circle prescribed on the map is in no way magic; should costs be exorbitant or sites unavailable, the spectrum could be broadened to a greater radius.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